

**REMARKS**

By this amendment, claim 45 has been amended and claims 51-54 have been added.

Accordingly, claims 10-15 and 45-54 are currently pending in the application, of which claims 10, 45 and 51 are independent claims. Applicants respectfully submit that the above amendments do not add new matter to the application and are fully supported by the specification.

In view of the above Amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

***Rejections Under 35 U.S.C. §102***

Claims 10 and 13 stand rejected under 35 U.S.C. §102(b) as being anticipated by U. S. Patent No. 6,011,309 issued to Ahn (“Ahn”). Applicants respectfully traverses this rejection for at least the following reasons.

Independent claim 10 recites “a conductive layer electrically connected to the wire *via the inter-reaction layer*”. An example of this claimed feature is shown in Fig. 4, in which the pixel electrode 82 is electrically connected to the drain electrode 66 *via the inter-layer reaction layer 96*.

In this regard, the Examiner asserted that, in Fig. 3a of Ahn, the connecting pad 153 is electrically connected to the gate line 115 via the source line 135 (Office Action, page 2). This assertion is respectfully disagreed with.

In Fig. 3a of Ahn, the connecting pad 153 is in direct contact with the gate line 115, and the source line 135 is not in contact with the gate line 115 at all. The electrical contact between the connecting pad 153 and the gate line 115 is formed by the direct contact therebetween. The

electrical contact between the connecting pad 153 and the gate line 115 excludes the source line 135. Ahn fails to disclose or suggest “a conductive layer electrically connected to the wire *via the inter-reaction layer*”. Thus, it is submitted that claim 10 is patentable over Ahn. Claim 13 is dependent from claim 10, and would be also patentable at least for the same reason.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §102(b) rejection of claims 10 and 13.

Claims 10, 11, 14, 15 and 45-49 stand rejected under 35 U.S.C. §102(e) as being anticipated by U. S. Patent No. 6,528,357 issued to Dojo, et al. (“Dojo”). Applicants respectfully traverse this rejection for at least the following reasons.

With respect to claims 10, 11, 14 and 15, independent claim 10 recites “a conductive layer electrically connected to the wire *via the inter-reaction layer*”. As mentioned above, an example of this claimed feature is shown in Fig. 4 of the present application, in which the pixel electrode 82 is electrically connected to the drain electrode 66 *via the inter-layer reaction layer* 96.

In this regard, the Examiner asserted that the interlayer dielectric film 127 corresponds to the claimed inter-layer reaction layer, and the pixel electrode 131 is electrically connected to the source electrode 126b via the interlayer dielectric film 127. This assertion is respectfully disagreed with.

As well known, the interlayer dielectric film 127 is dielectric and non-conductive. If the pixel electrode 131 and the source electrode 126b were not in direct contact, the interlayer dielectric film 127 would never be able to electrically connect the pixel electrode 131 to the

source electrode 126b. Thus, the interlayer dielectric film 127 does not correspond to the claimed inter-layer reaction layer.

Thus, Dojo fails to disclose or suggest “a conductive layer electrically connected to the wire *via the inter-reaction layer*”, as claimed. For these reasons, it is submitted that claim 10 is patentable over Dojo. Claims 11, 14 and 15 are dependent from claim 10, and would be also patentable at least for the same reasons.

With respect to claims 45-49, amended independent claim 45 recites “wherein the transparent conductive pattern is electrically connected to the gate wire or the data wire via the inter-layer reaction layer”. As previously mentioned, Dojo fails to disclose or suggest this claimed feature. Thus, it is submitted that claim 45 is patentable over Dojo. Claims 46-49 are dependent from claim 45, and hence would be also patentable at least for the same reason.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §102(b) rejection of claims 10, 11, 14, 15 and 45-49.

### ***Rejections Under 35 U.S.C. §103***

Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Dojo in view of U. S. Patent No. 5,814,836 issued to Hyun, *et al.* (“Hyun”). Applicants respectfully traverse this rejection for at least the following reasons.

Claim 12 is dependent from claim 10. As previously mentioned, claim 10 is believed to be patentable over Dojo because, for example, Dojo fails to disclose or suggest “a conductive layer electrically connected to the wire *via the inter-reaction layer*”.

Hyun discloses the drain electrode 143b formed of Al-Si (column 3, lines 58-60) but does not disclose or suggest “a conductive layer electrically connected to the wire *via the inter-*

*reaction layer*”. Since none of the cited references discloses or suggests this claimed feature, it is submitted that claim 10 is patentable over them. Claim 12 is dependent from claim 10 and hence would be also patentable at least for the same reason.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §103(a) rejection of claim 12.

Claim 50 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Dojo in view of U. S. Patent No. 5,771,110 issued to Hirano, *et al.* (“Hirano”). Applicants respectfully traverse this rejection for at least the following reasons.

Claim 50 is dependent from claim 45. As previously mentioned, claim 45 is patentable over Dojo because, for example, Dojo fails to disclose or suggest “a conductive layer electrically connected to the wire *via the inter-reaction layer*” as recited in claim 45.

Hirano discloses the insulting film 73 being formed of silicon oxide (column 22, lines 20-23). However, the insulting film 73 is non-conductive, and no electrical contact would be formed though the insulting film. Thus, Hirano fails to disclose or suggest “a conductive layer electrically connected to the wire *via the inter-reaction layer*”. Since none of the cited references discloses or suggests this claimed feature, it is submitted that claim 45 is patentable over them. Claims 50 is dependent from claim 45 and hence would be also patentable at least for the same reason.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §103(a) rejection of claim 50.

***Other Matters***

In this response, claim 45 has been amended to clarify the claimed feature. Also, claims 51-54 have been newly added to claim the disclosed invention from different perspectives.

**CONCLUSION**

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



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